

WHAT IS CLAIMED IS:

1. A resource reservation protocol substitute reply router transferring a verification message transmitted from a transmission host to the reception host for acquiring guarantee  
5 of service quality of a transmission route upon transmitting data packet from said transmission host to a reception host, comprising:

judgment means for monitoring a response message from said reception host for said verification message and making  
10 judgment whether said reception host is an equipment adapted to said resource reservation protocol or not; and

substitute resource reservation protocol control means for executing a procedure of resource reservation protocol on behalf of said reception host which is judged as not being adapted  
15 to resource reservation protocol and making reservation of resource on the route to said transmission host.

2. The resource reservation protocol substitute reply router as set forth in claim 1, wherein said judgment means monitors  
20 an internet control message protocol message being said response message from said reception host for a Path message of resource reservation protocol transmitted as said verification message and transmitted to a sender of data packet upon receipt of packet of not adapted protocol, and makes judgment whether said  
25 reception host is an equipment adapted to said resource reservation protocol or not from said internet control message protocol message.

3. The resource reservation protocol substitute reply router  
as set forth in claim 2, wherein said substitute resource  
reservation protocol control means generates a reserve message  
5 indicative of service quality in said transmission route for  
said Path message on behalf of said reception host, and transmits  
said reserve message to said transmission host.

4. The resource reservation protocol substitute reply router  
10 as set forth in claim 1, which is arranged adapting to a network  
in which a plurality of the reception hosts not supporting said  
resource reservation protocol and the reception hosts  
supporting said resource reservation protocol are present in  
admixing manner.

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5. The resource reservation protocol substitute reply router  
as set forth in claim 1, which is arranged in a network in which  
a plurality of the reception hosts not supporting said resource  
reservation protocol and the reception hosts supporting said  
20 resource reservation protocol are present in admixing manner.

6. The resource reservation protocol substitute reply router  
as set forth in claim 1, which is arranged respectively adapting  
to a network consisted of the reception host not supporting  
25 said resource reservation protocol and a network consisted of  
the reception host supporting said resource reservation  
protocol.

7. A resource reservation protocol substitute reply system transferring a verification message transmitted from a transmission host to the reception host for acquiring guarantee  
5 of service quality of a transmission route upon transmitting data packet from said transmission host to a reception host by a resource reservation protocol substitute reply router arranged between said transmission host and said reception host,

wherein said resource reservation protocol substitute  
10 reply router comprising:

judgment means for monitoring a response message from said reception host for said verification message and making judgment whether said reception host is an equipment adapted to said resource reservation protocol or not; and

15 substitute resource reservation protocol control means for executing a procedure of resource reservation protocol on behalf of said reception host which is judged as not being adapted to resource reservation protocol and making reservation of resource on the route to said transmission host.

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8. The resource reservation protocol substitute reply system as set forth in claim 7, wherein said judgment means monitors an internet control message protocol message being said response  
message from said reception host for a Path message of resource  
25 reservation protocol transmitted as said verification message and transmitted to a sender of data packet upon receipt of packet of not adapted protocol, and makes judgment whether said

reception host is an equipment adapted to said resource reservation protocol or not from said internet control message protocol message.

5     9.     The resource reservation protocol substitute reply system as set forth in claim 8, wherein said substitute resource reservation protocol control means generates a reserve message indicative of service quality in said transmission route for said Path message on behalf of said reception host, and transmits  
10    said reserve message to said transmission host.

10.    The resource reservation protocol substitute reply system as set forth in claim 7, wherein said resource reservation protocol substitute reply router is arranged adapting to a  
15    network in which a plurality of the reception hosts not supporting said resource reservation protocol and the reception hosts supporting said resource reservation protocol are present in admixing manner.

20    11.    The resource reservation protocol substitute reply system as set forth in claim 7, wherein said resource reservation protocol substitute reply router is arranged in a network in which a plurality of the reception hosts not supporting said resource reservation protocol and the reception hosts  
25    supporting said resource reservation protocol are present in admixing manner.

12. The resource reservation protocol substitute reply system  
as set forth in claim 7, wherein said resource reservation  
protocol substitute reply router is arranged respectively  
adapting to a network consisted of the reception host not  
5 supporting said resource reservation protocol and a network  
consisted of the reception host supporting said resource  
reservation protocol.

13. A resource reservation protocol substitute reply method  
10 transferring a verification message transmitted from a  
transmission host to the reception host for acquiring guarantee  
of service quality of a transmission route upon transmitting  
data packet from said transmission host to a reception host by  
a resource reservation protocol substitute reply router  
15 arranged between said transmission host and said reception host,

wherein said resource reservation protocol substitute  
reply router monitoring a response message from said reception  
host for said verification message executing a procedure of  
resource reservation protocol on behalf of said reception host  
20 which is judged as not supporting resource reservation protocol  
for making reservation of resource on the route to said  
transmission host.

14. The resource reservation protocol substitute reply method  
25 as set forth in claim 13, wherein said resource reservation  
protocol substitute reply router monitors an internet control  
message protocol message being said response message from said

reception host for a Path message of resource reservation protocol transmitted as said verification message and transmitted to a sender of data packet upon receipt of packet of not adapted protocol, and makes judgment whether said  
5 reception host is an equipment adapted to said resource reservation protocol or not from said internet control message protocol message.

15. The resource reservation protocol substitute reply method  
10 as set forth in claim 14, wherein said resource reservation protocol substitute reply router generates a reserve message indicative of service quality in said transmission route for said Path message on behalf of said reception host, and transmits said reserve message to said transmission host.

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16. The resource reservation protocol substitute reply method  
as set forth in claim 13, wherein said resource reservation protocol substitute reply router is arranged adapting to a network in which a plurality of the reception hosts not supporting  
20 said resource reservation protocol and the reception hosts supporting said resource reservation protocol are present in admixing manner.

17. The resource reservation protocol substitute reply method  
25 as set forth in claim 13, wherein said resource reservation protocol substitute reply router is arranged in a network in which a plurality of the reception hosts not supporting said

resource reservation protocol and the reception hosts supporting said resource reservation protocol are present in admixing manner.

- 5 18. The resource reservation protocol substitute reply method as set forth in claim 13, wherein said resource reservation protocol substitute reply router is arranged respectively adapting to a network consisted of the reception host not supporting said resource reservation protocol and a network  
10 consisted of the reception host supporting said resource reservation protocol.